

AMERICAN INTELLIGENCE.

On the Influence of the Climate of St. Augustine, Florida, on Pulmonary Affections. Communicated by J. C. WARREN, M. D. Professor of Anatomy and Surgery in Harvard University, Boston.

To the Rev. Dr. Porter, Theological Seminary, Andover.

DEAR SIR,—Having learnt that the state of your health caused you to visit St. Augustine, in Florida, I beg leave to propose some questions in regard to the influence of the climate of that place on pulmonary affections. Physicians in this vicinity are often much at a loss, in deciding between the climates of Havanna, St. Croix, and other places in the south, which may, on the whole, be preferable. I would, therefore, beg leave to avail myself of your personal experience on this subject, for my own benefit and that of others, in asking your opinion as to the climate of St. Augustine generally, and as to some particular points, which I will state:—

1. What is the common temperature of St. Augustine in the winter and spring months?
2. The range of the thermometer in these months?
3. The fluctuations of the thermometer as to their suddenness?
4. The degree of humidity of the atmosphere?
5. The frequency of cloudy, rainy, and of clear weather?
6. The predominant winds, and whether they blow over sea or land?
7. The character of the surrounding country—especially as to collections of fresh water, and slow streams of water?

Generally, whether you consider that climate favourable to pulmonary complaints, and to any other chronic affections?

The accommodations for the sick, and whether there is a physician residing there?

The population of the place. Its supply of articles of food, especially vegetables and fruits?

I am aware that it may not be in your power to answer all of these questions fully; but any information you can give respecting them will be valuable to the public, and will confer a favour on,

Your very respectful friend and servant,

JOHN C. WARREN.

Boston, Sept. 8th, 1830.

To J. C. Warren, M. D. Professor of Anatomy and Surgery in Harvard University, Boston.

MY DEAR SIR,—I regret that urgent official engagements, incident to the close of our academical year, have unavoidably delayed till this time, my reply to your inquiries respecting St. Augustine. I well know the sacrifices and solicitude of an invalid, compelled to seek refuge from the northern winter; and am aware that, for the coming season, not a few in these trying circumstances, must speedily make up their decision on a question deeply interesting to themselves and their friends. I know too, from personal experience, and from the testimony of eminent physicians, in Europe and in this country, that the choice of a proper residence for pulmonary invalids, in winter, is a subject environed

with difficulties; and that these difficulties are most felt by those gentlemen in your profession, who are most frequently called upon to give advice in these cases. The personal obligations which I have long been under to yourself, and the slightest hope that any advantage may accrue to others who need your professional advice, induce me most cheerfully to answer the inquiries of your letter in the best manner I am able.

I enclose to you an abstract from the meteorological diary kept at the military post in St. Augustine, which I procured in anticipation that I might apply it to some useful purpose. This abstract, which was obligingly made for me by A. Anderson, M. D. I presume is accurate, with the exception perhaps of one or two mistakes, which I suspect were made in transcribing the figures; and this alone is a better answer to some of your questions than any other I could give.

To the first and second questions, this table I presume furnishes an adequate reply. During the fifty months for which it was kept, including four winters, the thermometer in no case sunk below 42° of Fahrenheit; except that in 1829, the coldest winter perhaps ever known at St. Augustine, it sunk once in January to 28° , in February to 30° , and in March to 36° . The same temperature is denoted by vegetation as by the thermometer. The tropical products, such as sugar-cane, figs, and oranges, grow there in perfection, and garden vegetables thrive during the winter months.

As to *suddenness of fluctuation* in the thermometer, the monthly mean temperature of the table shows that the climate is much more equable than can be found any where north of Florida. Instead of the violent transitions of 30 degrees in 24 hours, which are not very uncommon in New England, and even in South Carolina, it is rare that a change of 10 degrees in the same day occurs in St. Augustine.

As to *humidity* of the atmosphere, I cannot answer with as much precision as I could wish, having seen no barometrical observations. The soil, being sandy and calcareous, is remarkably absorbent; so that after the heaviest shower, within an hour perhaps, there is no appearance of water in the streets. The air is certainly not as dry as that of our elevated grounds in New England, during the driest parts of our winter or summer; but the dampness that does exist with us is much more deleterious to health. In St. Augustine it is common for ladies to sit or walk in the evening air, without any covering to their heads, and yet without harm. This is probably owing to the fact, that the dampness is much like that on ship-board in the gulf-stream, which passes near the shore of Florida, and renders its air mild, equable, and tonic. The consequence is, that what we mean by *influenza*, it almost unknown there, and *common colds* are very harmless, generally passing off in a short time.

Besides the answer to the fifth inquiry contained in the table, I add, that, in distinction from our northern latitudes, as well as those of the West Indies, St. Augustine has no *long storms*, and no *rainy season*. Sometimes it has a violent storm of 24 or 30 hours, but rain generally falls in *showers*, succeeded by fine, fair weather. I have not found any meteorological tables by which I could satisfactorily compare the climate of the West Indies, or Italy, or the south of France, with that of St. Augustine, as to the number of fair days in a month. As to our own country, the only document to which I have access, of sufficient extent and accuracy to be relied on, is a register of weather, kept for 25 years, at and near New Haven, Conn. This gives an average, for the whole time, of about thirteen fair days in a month; whereas the average at St. Augustine appears to be about twenty-two. And were the comparison limited to the worst months in our climate, it would be much more encouraging to the migration of northern invalids; for example, according to the St. Augustine table, the number of clear days in March, as given for different years, is thus 24, 27, 20, 27; whereas according to the New Haven Register, in three out of four successive years, March had but eleven fair days, and twelve in the other.

The *predominant winds* are from some point of *east*; and coming from the main ocean across the gulf-stream, possess a vitality, and a genial softness, very exhilarating to the invalid. There are, however, occasional seasons of sharpness, rendering a little seclusion among the orange groves, better than lodgings immediately on the shore.

The *surrounding region* on the land side, is flat, but sandy. No marshes or stagnant streams are sufficiently near to vitiate the air of the city; yet I observed that when the wind blows from west or southwest, delicate people are more indisposed than when it blows from the eastward.

For pulmonary complaints, where there is no fixed organic disease, I think the climate eminently favourable. I think so, because I have seen its favourable influence in many cases, and have heard of it in many others. [But if disease of lungs has made such progress, that change of structure is begun, a more interior and less tonic air, I presume, would generally be better. The air of the city, however, has proved remarkably restorative in some cases of apparently regular consumption. In cases of dyspepsia, and other chronic affections, all the advantages may be expected here, that may be looked for any where, from a mild, pure, elastic atmosphere.

The *want of good accommodations*, particularly rooms for the sick, has heretofore been a subject of much complaint. This inconvenience was seriously felt the last winter, especially after the number of stranger invalids increased to sixty or eighty; and these from nearly every State, from Georgia to Canada. The houses are mostly in the Spanish style, old and uninviting. The spirit of building and repairing, however, which prevailed last season, will provide very comfortable lodgings, I presume, the coming winter, for most who shall need them. The want of fire-places has begun to be remedied in the more ancient rooms by the introduction of stoves. There is no deficiency as to medical advice, several respectable physicians residing in the city, one of whom, Dr. Anderson, has had much experience in New York, as physician to the "Infirmity for diseases of Lungs," and who has exchanged his residence for the benefit of Mrs. Anderson's health.

The *population* of the place has been estimated sometimes at two thousand, and sometimes at three thousand five hundred; the returns of the late census I have not seen.

My own restricted habits as to *diet*, render me incompetent to judge how far men who are fond of *free living* would be satisfied at St. Augustine. I heard some complaining, but remembered that invalids from home, are often querulous, and oftener still injudicious as to the variety and richness of food which they demand. Bacon, poultry, pigeons, venison, excellent fresh fish, sweet potatoes, and other garden vegetables, may be had in sufficient quantities. I saw no reason for complaining as to food, except that milk is inferior and rather scarce. The water too is inferior, though not unhealthy. The principal fruit is the sweet orange, which grows in abundance, and in the highest perfection. The price of board is about a dollar a day, and washing fifty cents a dozen.

The actual health of St. Augustine speaks much for its climate. In nearly three centuries, since its settlement, it is said but one instance of malignant fever has been known; and that is ascribed to the indiscretion of the Americans on the transfer of the country to the United States. The present American population comprises a number of very respectable families, which are constantly increasing. A Catholic, a Presbyterian, and a Methodist church are erected, and one for Episcopal worship is in contemplation.

But for incessant interruptions in writing the above statement, it would have been more valuable both for exactness and brevity. Probably the interior of Cuba or Santa Cruz may have some advantages, as a winter climate, over Florida; yet after thorough inquiry, and having been once at Havanna myself, I preferred St. Augustine: because its language and government are those of my own country; because its facilities of intercourse with one's friends, by water

and by mails, are a great convenience; and because it is easy of access, compared with any foreign residence. My passage was five days from New York to Charleston, and thence to St. Augustine twenty-five hours; returning to Charleston two days. Three good packets ply between the two cities; the passage varies with the weather, from one to four and even six days.

I will close this long communication, by hinting at several mistakes which I have observed to be often committed by those who travel for pulmonary complaints.

1. Deferring a change of climate till organic disease has fixed on the lungs, and then with glimmering hopes, and at immense sacrifices of comfort, migrating southward only to expire among strangers. Several persons who died last winter, soon after their arrival in Florida, might have lived longer probably, though under the sufferings of a hopeless malady, amid the comforts of a northern home.

2. Going southward only a few degrees of latitude, and stopping to winter amidst rain, and sleet, and mud. In my opinion it is better to remain on a steady *terra firma* of frost, with a dry atmosphere, or to go beyond frost.

3. Going to the *sea-coast* of the southern states. The up-country of South Carolina and Georgia, except in rainy seasons, presents a fine winter climate to the northern invalid, if he is properly careful to guard against violent transitions of temperature. But it is a great mistake to suppose that the corresponding latitudes on the sea-coast, because warmer, must be more favourable to diseased lungs. This delicate organ, when predisposed to irritation, is certainly injured by the great *humidity* of what southern physicians often term the *malaria* country of the south. Charleston, for example, besides other and great attractions to strangers which it possesses, has an excellent winter climate for good constitutions; but is by no means a proper residence for consumptive persons. The same thing is true, probably to a smaller extent, of Savannah, and to a considerably greater of New Orleans.

With great respect I am, dear sir, yours, &c.

E. PORTER.

P.S. Of St. Mary's, which is about seventy miles north of St. Augustine, I have no personal knowledge, but have been informed, on good authority, that its climate is nearly as good as that of St. Augustine, and its accommodations better.

Theological Seminary, Andover, October, 1830.

Saturday Morning, Oct. 3d.

DEAR SIR,

I send this the first moment I could find to prepare it. If you think proper to publish it, as your note intimates, I have no objection, especially as it may save me a particular answer to some scores of inquiries. In that view I return your own letter, as you may have no copy.

Yours, &c.

E. PORTER.

The following is an extract from a meteorological diary, kept at the hospital department of the United States' army, at St. Augustine made by Dr. Anderson.

The observations were made daily at 7 A. M., 2 P. M., and 9 P. M. The mean temperature is made from the general diary.

DIARY.

Months.	Highest.	Lowest.	Mean Temperature.			Winds.	Number of Fair days.
			7 A.M.	2 P.M.	9 P.M.		
1825.							
August, - -	94°	80°	82°	83°	85°	S. W.	19
September, - -	87	76	75	80	76	N. E.	14
October, - -	86	58	76	86	80	N. E.	22
November, - -	76	53	62	69	65	N. E.	20
December, - -	76	42	60	75	52	N. E.	26
1826.							
January, - -	68	44	52	55	54	N. E.	19
February, - -	77	52	60	79	65	N. E.	17
March, - -	80	62	66	71	70	S. E.	24
April, - -	84	60	72	85	83	S. W.	24
May, - -	82	74	77	80	67	S. W.	27
June, - -	88	80	81	81	81	N. E.	22
July, - -	92	80	80	86	83	N. E.	21
August, - -	90	76	81	84	80	N. E.	18
September, - -	89	73	77	78	80	N. E.	21
October, - -	83	61	70	96	64	S. E.	24
November, - -	80	52	60	64	70	N. W.	15
1827.							
April, - -	86	66	68	71	66	S. E.	21
May, - -	85	64	72	77	72	S. E.	20
June, - -	91	72	75	80	76	S. E.	23
July, - -	93	78	82	86	82	S. E.	14
August, - -	91	75	81	83	82	S. E.	25
September, - -	96	75	70	80	71	N. E.	16
October, - -	86	60	70	76	67	N. E.	23
November, - -	76	48	58	68	63	N. W.	21
December, - -	76	44	66	67	62	S. E.	21
1828.							
January, - -	83	46	63	70	66	S. E.	18
February, - -	84	52	67	70	61	S. E.	19
March, - -	82	50	52	63	61	S. E.	27
April, - -	84	50	66	72	58	N. E.	24
May, - -	90	71	74	76	74	S. E.	24
June, - -	80	74	79	84	80	S. E.	14
July, - -	90	76	68	75	71	S. E.	15
August, - -	87	77	80	84	95	S. E.	13
September, - -	85	70	77	82	79	S. E.	14
October, - -	80	60	69	75	69	N. E.	15
November, - -	81	53	60	69	64	S. E.	24
December, - -	78	61	60	70	64	S. E.	13
1829.							
January, - -	68	28	53	65	56	N. W.	24
February, - -	77	30	53	60	52	N. E.	13
March, - -	76	36	53	64	56	N. W.	20
April, - -	74	52	61	70	66	S. E.	27
May, - -	82	63	67	76	62	S. E.	9
June, - -	94	70	77	84	80	S. W.	18
July, - -	89	75	78	84	83	S. E.	14
August, - -	91	76	81	85	83	S. E.	23
September, - -	86	72	77	82	78	N. E.	15
1830.							
January, - -	68	46	56	61	59	N. E.	27
February, - -	76	46	57	63	58	N. E.	23
March, - -	80	50	62	68	65	S. W.	27